PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-164692
(43)Date of publication of application : 25.06.1996

(51)Int.Cl. B43K 3/00

(21)Application number : 06-312007
(22)Date of filing : 15.12.1994

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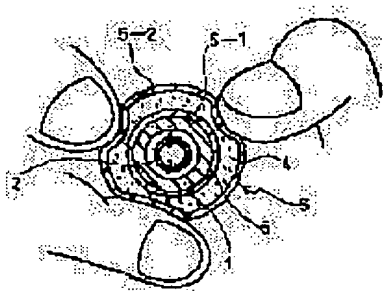
(54) GRIP FOR WRITING INSTRUMENT

(57)Abstract:
PURPOSE: To perform the effects of gripping feeling and no fatigue of a finger tip for a long period.
CONSTITUTION: A sealed object 4 for imparting suitable elasticity to a soft outer cylinder 5-2 is sealed in a grip body 5 formed of a soft inner cylinder 5-1 having substantially the same thickness as the outer diameter of the grip of a barrel 1 and the cylinder 5-2 coupled integrally with the end of the cylinder 5-1 thereby to give the elasticity (repelling force) to a finger pressure to the cylinder 502 in contact with the finger at the body 5.



LEGAL STATUS

[Date of request for examination]	23.05.2001
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	3431317
[Date of registration]	23.05.2003
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

* NOTICES *

1.This document has been translated by computer. So the translation may not reflect the original precisely.
2.**** shows the word which can not be translated.
3.In the drawings, any words are not translated.

CLAIMS

[Claim(s)]
[Claim 1] The grip for writing implements which comes to enclose the enclosure object which constitutes the body of a grip from an elasticity container liner of the size made into the outer diameter and ****** of the grip section of a shaft tube, and an elasticity outer case one was made to connect with this elasticity container liner in that edge, and gives moderate resiliency at this elasticity outer case between said elasticity container liner of this body of a grip, and an elasticity outer case.

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* NOTICES *

DETAILED DESCRIPTION

[Detailed Description of the Invention]
[0001]
[Industrial Application] This invention relates to the grip in writing implements, such as a ball-point, a felt-tipped marker, and a mechanical pencil.
[0002]
[Description of the Prior Art] Conventionally, the grip structure with which made it a fingertip not get tired to a moderate grip feel (grip feeling) and prolonged use by the elasticity barrel 11 moderately dented by acupressure of each finger (the thumb, an index finger, and middle finger) which is made to equip the grip section of a shaft tube 10 with the elasticity barrel 11 like, and contacts at the time of support shown in drawing 4 as this kind of a grip for writing implements is known (refer to JP,63-60375,U).
[0003]
[Problem(s) to be Solved by the Invention] However, ** et al. and conventionally [this], the grip of a writing implement is constituted so that it may dent moderately by acupressure in the range in which the elasticity barrel 11 hits the grip section peripheral surface of a shaft tube 10. That is, since it is constituted so that the part which the finger contacted because the elasticity barrel 11 is maintaining moderate elastic force (repulsive force) may be dented by acupressure, the effectiveness is lost when the elastic force of the elasticity barrel 11 declines in long-term use. although it is alike and the elasticity barrel 11 made of rubber is an appropriate thing [opposing moderately to acupressure according to the elastic force], and a grip feel and a fingertip do not get tired and it plans like, rubber has the inclination (extended inclination) to wear out by repeating contact on a finger in long-term use, and to become bored, on the property, and the repulsive force over acupressure is lost as a result. Therefore, it had the fault which lacks in the long-term stability referred to as that the effectiveness falls gradually with the fall of the elastic force of the elasticity barrel 11 accompanying progress of a period, the elastic force of the elasticity barrel 11 finally completely loses it, and the effectiveness of it is lost although the conventional grip structure demonstrates the effectiveness that said grip feel and fingertip do not get tired in the first stage. Moreover, since the rib 13 which secures the depression opening 12 between grip section peripheral surfaces is formed in the inside of the elasticity barrel 11 in order to make it dent the elasticity barrel 11 by acupressure, the conventional grip structure serves as an obstruction which bars the moderate depression deformation with which a grip feel and a fingertip according [a rib 13] to the elasticity barrel 11 are not tired, and which is aimed at like. Therefore, in the former, the place to grasp is restricted and a use kitchen is bad.
[0004] This invention was not made in view of the situation such conventionally, and aims at offering the grip for writing implements improved so that it might continue at a long period of time and exertion maintenance of the effectiveness of a grip feel (grip feeling) and a fingertip not getting tired could be carried out.
[0005]
[Means for Achieving the Goal] The technical means which this invention provides in order to attain the above-mentioned purpose constitute the body of a grip from an elasticity container

liner of the size made into the outer diameter and ****** of the grip section of a shaft tube, and an elasticity outer case one was made to connect with this elasticity container liner in that edge, and make it a summary to come to enclose the enclosure object which gives moderate resiliency at this elasticity outer case between said elasticity container liner of this body of a grip, and an elasticity outer case. Incidentally, as the above-mentioned enclosure object, liquids, such as gases, such as air and inert gas, and water, or the gel matter is mentioned.
[0006]
[work —] for According to the technical means of this invention **(ed) and described above, the enclosure object enclosed with the interior of the body of a grip makes the elastic force (repulsive force) over acupressure demonstrate, and it plans to the appearance with which a grip feel (grip feeling) and a fingertip do not get tired.
[0007]
[The example of fruit **] If an example of operation of this invention is explained below based on a drawing, a drawing inserts in an extra lead 2 (it is also called a green sand core) in a shaft tube 1 as a writing implement. The tip chip 2a The case of the ball-point made to project and come to face from the point implement 3 at shaft tube 1 tip is shown. When fit-in arrival of the body 5 of a grip which enclosed the enclosure object 4 with the grip section of a shaft tube 1 is carried out and acupressure starts the external surface of the body 5 of a grip, the elastic force (repulsive force) over acupressure is made to demonstrate with the enclosure object 4, and it holds, and is made for a feel (grip feeling) and a fingertip to stop getting tired.
[0008] elasticity container liner 5-1 of the size made into the outer diameter and ****** of the cross-section ring-like crevice 6 which formed the body 5 of a grip in the grip section of a shaft tube 1 This elasticity container liner 5-1 Elasticity outer case 5-2 made to connect with one in an edge It constitutes and is this elasticity outer case 5-2. Said elasticity container liner 5-1 By enclosing the enclosure object 4 in between, it is the elasticity outer case 5-2. Moderate resiliency is given.
[0009] Elasticity container liner 5-1 Elasticity outer case 5-2 It consists of an elasticity ingredient [**** / the thermoplastics material which has moderate elasticity or rubber, an elastomer, etc.], the longitudinal section is really fabricated by saccate [of an abbreviation semicircle] by the proper fabricating method (refer to drawing 1), and the enclosure object 4 is enclosed.
[0010] The enclosure object 4 is the elasticity outer case 5-2 which it is enclosed in the body 5 of a grip, and a finger touches. The duty which gives the moderate elastic force over acupressure is accomplished, and it consists of liquids, such as gases, such as air and inert gas, and water, or gel matter, and is the elasticity outer case 5-2 by acupressure. It encloses in the body 5 of a grip in the amount of enclosure which can demonstrate elastic force by denting moderately. in addition, enclosure of the enclosure object 4 — the time of shaping of the body 5 of a grip — or it is performed by the fabricating after shaping. namely, the primary operation and coincidence which fabricate the body 5 of a grip — or elasticity outer case 5-2 which the enclosure object 4 is enclosed in the body 5 of a grip by the fabricating after primary operation, and a finger touches The moderate elastic force over acupressure is given.
[0011] It **, and according to the grip of this example, since it is the structure demonstrated with the enclosure object 4 which enclosed the elastic force [as opposed to / like / acupressure of the thumb, an index finger, and the middle finger] (repulsive force) shown in drawing 3 in the body 5 of a grip, it continues at a long period of time, and the effectiveness of a grip feel (grip feeling) and a fingertip not getting tired can be demonstrated. That is, there is nothing that is conventionally become bored like a grip (elastic force declines), even if it wears out the elasticity outer case 5-2 which constitutes the body 5 of a grip by contact on a finger in long-term use, and it continues at a long period of time, and stability can improve effectiveness of a grip feel and a fingertip not getting tired exertion maintenance.
[0012] in addition — although explained in the above-mentioned example in the case of a ball-point — the writing implement which can equip with grips, such as not only a ball-point but a mechanical pencil, and a felt-tipped marker, — this invention is targeting all.
[0013]

[Effect of the Invention] Since it comes to constitute the grip for writing implements of this invention like the above statement, it does the following operation effectiveness so. Since it constitutes and becomes so that the enclosure object within the body of a grip which consists of an elasticity container liner and an elasticity outer case may give the elastic force (repulsive force) over acupressure to the elasticity outer case which a finger touches, there will be nothing that is conventionally become bored like a grip (elastic force declines), even if it wears out the elasticity outer case of the body of a grip by contact on a finger in long-term use.
[0014] Therefore, according to the grip of this invention, it continues with the enclosure object within the body of a grip at a long period of time, and stability can improve effectiveness of a grip feel (grip feeling) and a fingertip not getting tired exertion maintenance.

[Translation done.]

(19)日本国特許庁（ＪＰ）　(12)公開特許公報（Ａ）　(11)特許出願公開番号

特開平8－164692

(43)公開日　平成８年(1996)６月25日

(51)Int.Cl.[6]	識別記号	庁内整理番号	ＦＩ	技術表示箇所
Ｂ４３Ｋ　3/00		Ｆ		

審査請求　未請求　請求項の数１　ＯＬ　（全 3 頁）

(21)出願番号　特願平6－312007

(22)出願日　平成６年(1994)12月15日

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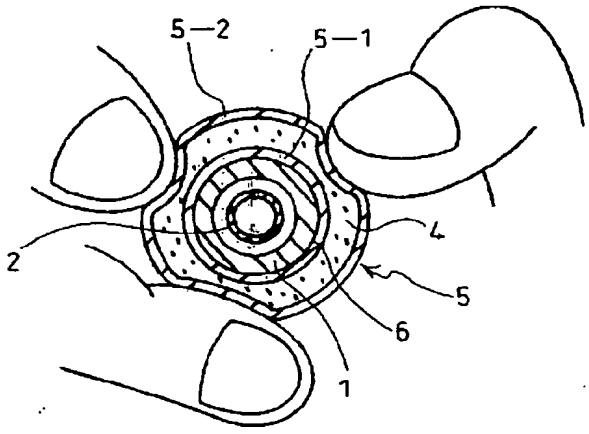
(54)【発明の名称】　筆記具用グリップ

(57)【要約】

【目的】　グリップ感覚と指先が疲れない等の効果を長期に亘り発揮し得る様にすることにある。

【構成】　軸筒１の握り部の外径と略同径とする太さの軟質内筒5-1 と、この軟質内筒5-1 にその端部において一体に連結せしめた軟質外筒5-2 とで構成したグリップ本体５内に、軟質外筒5-2 に適度の弾力性を付与する封入物４を封入することで、指圧に対する弾性力（反発力）をグリップ本体５の指が触れる軟質外筒5-2 に与える様にしたものである。



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【特許請求の範囲】

【請求項１】　軸筒の握り部の外径と略同径とする太さの軟質内筒と、この軟質内筒にその端部において一体に連結せしめた軟質外筒とでグリップ本体を構成し、該グリップ本体の前記軟質内筒と軟質外筒との間に、該軟質外筒に適度の弾力性を付与する封入物を封入してなる筆記具用グリップ。

【発明の詳細な説明】

【０００１】

【産業上の利用分野】本発明は、ボールペン、サインペン、シャープペン等の筆記具におけるグリップに関するものである。

【０００２】

【従来の技術】従来、この種の筆記具用グリップとしては図４に示した様に、軸筒10の握り部に軟質筒体11を装着せしめて、掴持時に当接する各指（親指、人差し指及び中指）の指圧により適度に凹む軟質筒体11により、適度の握り感触（グリップ感覚）と長時間使用に対して指先が疲れない様にしたグリップ構造が知られている（実開昭63－60375 号参照）。

【０００３】

【発明が解決しようとする課題】しかし乍ら、この従来筆記具のグリップは軟質筒体11が軸筒10の握り部周面に当たる範囲で指圧により適度に凹む様に構成されている。即ち、軟質筒体11が適度の弾性力（反発力）を保っている事で指が当接した部分が指圧により凹む様に構成されていることから、長期使用において軟質筒体11の弾性力が低下した場合にはその効果がなくなる。然るに、ゴム製の軟質筒体11はその弾性力により指圧に対して適度に反発することで、握り感触と指先が疲れない様に図るものであるが、ゴムはその性質上、長期使用において指との接触を繰り返す事で摩耗されてだれる傾向（伸びる傾向）があり、結果として指圧に対する反発力を失う。従って、従来のグリップ構造は初期においては前記握り感触と指先が疲れない効果を発揮するものの、期間の経過に伴う軟質筒体11の弾性力の低下に伴いその効果が徐々に低下し、最終的には軟質筒体11の弾性力が全く失ってしまい効果がなくなると言った長期の安定性に欠ける不具合を有していた。又、従来のグリップ構造は軟質筒体11が指圧により凹む様にするために、握り部周面との間にその凹み空隙12を確保するリブ13が軟質筒体11の内面に設けられている事から、リブ13が軟質筒体11による握り感触と指先が疲れない様に図る適度の凹み変形を妨げる障害物となる。従って、従来では握る所が限られ、使用勝手が悪い。

【０００４】本発明はこの様な従来事情に鑑みてなされたもので、握り感触（グリップ感覚）と指先が疲れない等の効果を長期に亘り発揮維持し得る様に改良した筆記具用グリップを提供することを目的とする。

【０００５】

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【課題を達成するための手段】上記目的を達成するために本発明が講じる技術的手段は、軸筒の握り部の外径と略同径とする太さの軟質内筒と、この軟質内筒にその端部において一体に連結せしめた軟質外筒とでグリップ本体を構成し、該グリップ本体の前記軟質内筒と軟質外筒との間に、該軟質外筒に適度の弾力性を付与する封入物を封入してなる事を要旨とする。ちなみに、上記封入物としては空気、不活性ガス等の気体、水等の液体、或いはゲル状物質等が挙げられる。

【０００６】

【作　　用】而して、上記した本発明の技術的手段によれば、グリップ本体の内部に封入した封入物が指圧に対する弾性力（反発力）を発揮せしめて、握り感触（グリップ感覚）と指先が疲れない様に図る。

【０００７】

【実　施　例】本発明の実施の一例を図面に基づいて以下説明すると、図面は筆記具として軸筒１内に替芯２（中芯とも称する）を装入してその先端チップ2aを、軸筒１先端の先具３から突出臨ませてなるボールペンの場合を示し、軸筒１の握り部に封入物４を封入したグリップ本体５を嵌装着せしめて、グリップ本体５の外面に指圧が掛かった場合、封入物４により指圧に対する弾性力（反発力）を発揮せしめて掴み感触（グリップ感覚）と指先が疲れない様にしてなる。

【０００８】グリップ本体５は、軸筒１の握り部に設けた断面リング状凹部６の外径と略同径とする太さの軟質内筒5-1 と、この軟質内筒5-1 の端部において一体に連結せしめた軟質外筒5-2 とで構成し、該軟質外筒5-2 と前記軟質内筒5-1 との間に封入物４を封入することで、軟質外筒5-2 に適度の弾力性を付与する様にしてある。

【０００９】軟質内筒5-1 と軟質外筒5-2 とは、適度の弾性を有する熱可塑性樹脂材、或いはゴム、エラストマー等の所望な軟質材料からなり、適宜な成形法により縦断面が略半月形の袋状に一体成形され（図１参照）、封入物４を封入する様にしてある。

【００１０】封入物４は、グリップ本体５内に封入される事で、指が触れる軟質外筒5-2 に指圧に対する適度の弾性力を付与する役目を成すもので、空気、不活性ガス等の気体、水等の液体、或いはゲル状物質からなり、指圧により軟質外筒5-2 が適度に凹むことで弾性力を発揮し得る封入量にてグリップ本体５内に封入する。尚、封入物４の封入はグリップ本体５の成形時に、或いは成形後の二次加工により行われるものである。即ち、グリップ本体５を成形する一次加工と同時か、或いは一次加工後の二次加工により封入物４はグリップ本体５内に封入されて、指が触れる軟質外筒5-2 に指圧に対する適度の弾性力を付与するものである。

【００１１】而して、本実施例のグリップによれば、図３に示した様に親指、人差し指及び中指の指圧に対する弾性力（反発力）をグリップ本体５内に封入した封入物

４により発揮する構造である事から、長期に亘り握り感触（グリップ感覚）と指先が疲れない等の効果を発揮し得る。即ち、グリップ本体５を構成する軟質外筒5-2が長期使用において指との接触により摩耗しても従来グリップの如くだれる（弾性力が低下する）ことがなく、握り感触と指先が疲れない等の効果を長期に亘り安定よく発揮維持し得るものである。

【００１２】尚、上記した実施例においてはボールペンの場合で説明したが、ボールペンに限らず、シャープペンやサインペン等のグリップの装着が可能な筆記具全てを本発明は対象としているものである。

【００１３】

【発明の効果】本発明の筆記具用グリップは叙上の如く構成してなるから、下記の作用効果を奏する。軟質内筒と軟質外筒とからなるグリップ本体内の封入物が指が触れる軟質外筒に対して指圧に対する弾性力（反発力）を付与する様に構成してなることから、グリップ本体の軟

質外筒が長期使用において指との接触により仮に摩耗しても従来グリップの如くだれる（弾性力が低下する）ことはない。

【００１４】従って、本発明のグリップによれば、握り感触（グリップ感覚）と指先が疲れない等の効果をグリップ本体内の封入物により長期に亘り安定よく発揮維持し得るものである。

【図面の簡単な説明】

【図１】　本発明筆記具用グリップの実施の一例を示した部分断面図

【図２】　図１のII－II線に添わせた断面図

【図３】　使用状態を示した同断面図

【図４】　従来例を示した断面図

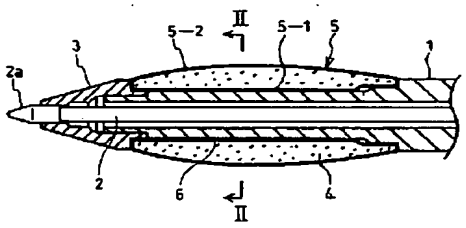
【符号の説明】

１…軸筒　　４…封入物

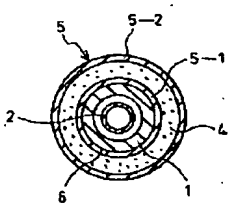
５…グリップ本体　　5-1 …軟質内筒

5-2 …軟質外筒

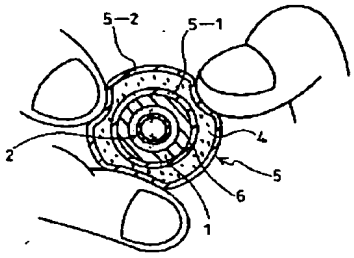
【図１】



【図２】



【図３】



【図４】